UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/559,903	12/07/2005	Hideaki Kimata	44471/323889 1045	
23370 JOHN S. PRAT	7590 06/24/201 T, ESO	EXAMINER		
KILPATRICK	STOCKTON, LLP	THOMPSON, JAMES A		
1100 PEACHT SUITE 2800	KEE SIKEEI	ART UNIT	PAPER NUMBER	
ATLANTA, GA	A 30309	2625		
			MAIL DATE	DELIVERY MODE
			06/24/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No		Applicant(s)				
Office Action Summary		10/559,903		KIMATA ET AL.				
		Examiner		Art Unit				
		James A. Thom		2625				
The MAILING DAT Period for Reply	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).								
Status								
1) Responsive to com	nmunication(s) filed on <u>07 De</u>	ecember 2005						
2a) This action is <b>FINA</b>	· · ·	action is non-fir	nal					
<u> </u>	/ <del></del>			secution as to the	a marite ie			
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
ciosed in accordan	ce with the practice under L	.x parte Quayle,	1900 O.D. 11, 40	. J.				
Disposition of Claims								
<ul> <li>4) Claim(s) 1-32 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5) Claim(s) is/are allowed.</li> <li>6) Claim(s) is/are rejected.</li> <li>7) Claim(s) is/are objected to.</li> <li>8) Claim(s) 1-32 are subject to restriction and/or election requirement.</li> </ul>								
Application Papers								
9)☐ The specification is	objected to by the Examine	r.						
10)☐ The drawing(s) filed	l on is/are: a)∏ acce	epted or b)□ ob	jected to by the E	Examiner.				
Applicant may not re-	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority under 35 U.S.C. § 1	19							
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>								
Attachment(s)  1)  Notice of References Cited (F	PTO-892)	4)	] Interview Summary					
	nt Drawing Review (PTO-948)	5) <u></u>	Paper No(s)/Mail Da Notice of Informal Pa Other:	te				

Application/Control Number: 10/559,903 Page 2

Art Unit: 2625

## **DETAILED ACTION**

## Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-8, 16, 17, 19, 20, 22 and 23, drawn to an image encoding methods and devices which classifies each frame into a plurality of categories, predicts the next frame based on a plurality of similarly classified frames, computes a difference between the current frame and the predicted frame, and encodes and stores the current frame into a category.
- II. Claims 9-15, 18, 21 and 24, drawn to an image decoding methods and devices which decodes the category number of the current frame, decodes a corresponding reference image, produces a predicted frame, decodes the current frame, and stores the current frame into reference memory.
- III. Claims 25 and 27, drawn to an image encoding method and device which produces high band image data and low band image data by setting a reference image specifying data for a plurality of frames of a category, producing a predicted image by selecting an image data from image data of a plurality of frames of the category, producing and encoding high band image data from image data of the current frame and predicted image, encoding reference image specifying data, encoding a category number of the current frame, and producing low band image data from the high band image data and predicted image.

Art Unit: 2625

IV. Claims 26 and 28, drawn to an image decoding method and device which decodes image data from high band image data and low band image data by decoding a category number of a current frame, setting a reference image specifying data for image data of a stored frame belong to the category of the current frame, decoding the reference image specifying data, producing a low band image data specified by the reference image specifying data, decoding the high band image data, producing the decoded image from the high band image data and the predicted image, and storing the decoded image of the current frame into the appropriate category.

The inventions are distinct, each from the other because of the following reasons:

Inventions I, II, III and IV are directed to related methods and devices. The related inventions are distinct if: (1) the inventions as claimed are either not capable of use together or can have a materially different design, mode of operation, function, or effect; (2) the inventions do not overlap in scope, i.e., are mutually exclusive; and (3) the inventions as claimed are not obvious variants. See MPEP § 806.05(j). In the instant case, the inventions as claimed have different functions. Inventions I and III encode image data using distinctly different methodologies. The four inventions appear from the record not to be obvious variants. Furthermore, as noted, the inventions as claimed do not encompass overlapping subject matter and there is nothing of record to show them to be obvious variants.

Restriction for examination purposes as indicated is proper because all these inventions listed in this action are independent or distinct for the reasons given above <u>and</u> there would be a serious search and examination burden if restriction were not required because one or more of the following reasons apply:

- (a) the inventions have acquired a separate status in the art in view of their different classification;
- (b) the inventions have acquired a separate status in the art due to their recognized divergent subject matter;
- (c) the inventions require a different field of search (for example, searching different classes/subclasses or electronic resources, or employing different search queries);
- (d) the prior art applicable to one invention would not likely be applicable to another invention;
- (e) the inventions are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

Applicant is advised that the reply to this requirement to be complete must include

(i) an election of a invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to

Art Unit: 2625

petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected invention.

If claims are added after the election, applicant must indicate which of these claims are readable upon the elected invention.

Should applicant traverse on the ground that the inventions are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Thompson whose telephone number is (571)272-7441. The examiner can normally be reached on 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on 571-272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/559,903 Page 6

Art Unit: 2625

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James A Thompson/ Primary Examiner, Art Unit 2625

14 June 2010